

7. I 64-\$,=(8 8.)*(#. :6"8 5 7"14-:(,8 :4" #6(+-"*4\$:6++." 4-\$*\$+. ()*"7%636"8 :+"4-(: +(E 4:\$1 :5%67 -"8,5-\$ \$;%676"- 5\$+5*"-.+ . 8 (#+6+(,8 ((\$) . -\$8 : 4\$\$-:"-4-:<&=(E \$;%64-,E,)\$45\$%H5<4\$#+6"8,9-\$ *"6%(#6' (, (-\$3\$: . E 7\$5<8"+-\$: A4"8(*+\$1 5\$+0"*"+' ((#6:(4(- \$- +6N(E)\$4-\$,++ . E (+"<4-6++ . E 5\$%%"5-(:+ . E <4(%(1, , :%,&=(E4,)*65-(9"45(8 :\$)%\$="+"8 +6N"1 4\$:8"4-+\$1 \$-:"-4-:"++\$4-((+6N(8 :5%67\$8, - <4(%(1,)*(#:6++ . E 47"%6-H 8 (* ;\$%" #6=(="++ . 8 \$- *(456 ;"74-:(1 : 4%"7<&="8 7"4,-(%)-((:\$;%63\$ + . +"N+"3\$ (;<7<="3\$)\$5\$%"+(1.

8. Q . : . *6F6"8 3%<;\$961N<&)*(#+6-"%H+\$4-H)*6:(-"%H4-:<(+6*\$7<O)\$+((#6)*\$:"7"+(" A4"8(*+\$1 5\$+0"*"+' (()\$ <8"+HN"+(& \$)64+\$4-(;"74-:(1 (\$4\$;\$;%63\$76*(8 +64"%"+("

<,#: (8\$4-(¹5 \$)64+\$4-, 8² ((E *(45\$:. C+6)\$79"*5+<%6 +"\$;E\$7(8\$4-H (\$)*"7"(%6
)<-(4\$#76+(,)\$-"+' (6%6 \$)*"7"(%6

3. !(45 ;"74-:(, :\$#+(56"- : -\$8 4%<96", 5\$376 3(7*\$8"- "\$*\$%\$3(9"45(",
3"\$%\$3(9"45(" (7*<3(" \$)64+\$4-(:4-<)6&- :\$:#6(8\$7"14-:(" 4 065-\$*68(<,#:(8\$4-(
0(#(9"45\$3\$, 4\$ '(6%H+\$3\$, P5\$+\$8(9"45\$3\$ (P5\$%\$3(9"45\$3\$ E6*65-"*6. D*(9(+ \$1
)76:%,&="3\$;\$%HN(+4-:6 ;"74-:(1 ,:%,&-4, 3(7*\$8"- "\$*\$%\$3(9"45(" ,:%"+(,.
I"48\$-* , +6 *64-<="")\$+(86+(" ()*(#+6+(" :6F+\$4-(<8"+HN"+(, *(456 ;"74-:(1 (<5*")%"+(,)\$-"+' (6%6 : \$;%64-(*"63(*\$:6+(, +6 ;"74-:(, ;"74-:(, (, : 964-+\$4-(,
64)"5- . <)*6:%"+(, *(45\$8 ;"74-:(1 (<8"+HN"+(, P-\$3\$ *(456,)\$-)*"F+"8< ,:%,&-4,
)*\$;% "8\$1 3%\$;6%H+\$3\$ 864N-6;6.

4. B"1964 +6 8"F7<+6*\$7+\$1 6*"+")*(#+6"-4, -\$- 065-, 9-\$ <4(%(,)\$ <8"+HN"+(&
(45\$: ;"74-:(1 7\$%F+. +6 4(4-"86-(9"45\$1 \$4+\$:" (+- "3(*\$:6-H4, :)\$%(- (5< ,)%6+ . (<)
)*\$3*688 . <4-\$19(:\$3\$ *6#:(-(, (4\$5*6="+(, 864N-6;\$: +("=- . (\$)(*6-H4, +6
7:<4-\$*\$++", *"3(\$+6%H+\$" (8"F7<+6*\$7+\$" 4\$-<*7+(9"4-:\$, :5%&96,)6*-+"*4-:\$.
?4-\$19(:\$" *6#:(-(, 4\$5*6="+(" 864N-6;\$: +("=- . , +67%"F6=" " <)*6:%"+(" (<8"+HN"+(" *
(456 ;"74-:(1 ,:%,&-4, :#6(8\$)\$75*")%,&=(8(#676968(, (: "'% ,E *"N"+(, :\$#8\$F+ . E ;<7<=(E)*\$;% "8 4%"7<"- 65-(: (#(*\$:6-H <4(%(,)\$ 4\$#76+(& +6
\$;=(++\$8 (+6' (\$+6%H+\$8 <*\$:+,E +"\$;E\$7(8\$3\$)\$-"+' (6%6 7%, <)*6:%"+(, *(45\$8 (<8"+HN"+(,
P-\$3\$ *(456. S65\$1)\$7E\$7 4%"7<"-)*(#+6-H :6F+ . 8 4\$4-6:%,&=(8 P%"8"+-\$8 7\$4-(F"+(, 8"F7<+6*\$7+\$ 4\$3%64\$:6++ . E "'%"1 : \$;%64-(*6#:(-(, : -\$8
9(4%" "'%"1, (#%F"++ . E : >"5%6*6' ((- .4,9%"- (,.

5. A6F+\$4-H)\$\$=*"+(, <4%(1)\$ <8"+HN"+(& *(456 ;"74-:(1 +6 8"F7<+6*\$7+\$8 (*
"3(\$+6%H+\$8, 6 -65F" +6' (\$+6%H+\$8 (8"4-+\$8 <*\$:+,E :)\$4%"7+(" +"45\$H5\$ %"- +6N%6 4:\$")
*(#+6+(" : "'%\$8 *,7" \$4+\$:+. E *68\$9+ . E 8+\$3\$4-\$*\$++(E)*\$3*688 (7"5%6*6' (1⁴⁵.

7.

II. :LV! *: (<7>, 5P>98<=RA ?<QE7FI8I > ;I?8I<M>S<;6>< Q898S>

\$. (<7>

10. A4"8 (*+6, 5\$+0"*"+' (,)\$ <8"+HN"+(& \$)64+\$4-(;"74-:(1 ; .%6 4\$#:6+6)\$
*"N"+(& J"+"*6%H+\$1 @4468;%"(7%, *"6% (#6' ((), -(5\$+5*"-.+ .E '"%"1⁶:

6) #6: "*"N(-H *6;\$-< ()*"74-6:(-H (+0\$*86' (&)\$ \$;#\$*< L\$5\$36845\$1
4-*6-"3((("" D%6+6 7"14-:(1 +6)"78"- \$;+ \$:%"+(, *<5\$:\$7, =(E \$4+\$: <8"+HN"+(,
\$)64+\$4-(;"74-:(1 4 <9"- \$8 -*" ;\$:6+(1 2 2I : "56;

b) b 0 - 0 T~~T~~3 46Tf 4.7Tc 1 Tf 0.25 0 T,4:%"+(,

>\$4-(F"+(" P-\$3\$ *"#<%H-6-6)\$-*";<"-)\$%+\$1)*(:"*F"++\$4-(P-\$1 '""%(()\$%+\$864N-6;+\$3\$ <964-(, :4"E 4\$\$-:"-4-:<&=(E 4<;T"5-\$:, :5%&96,)*6:(-"%H4-:6, *"3(\$+6%H+. " (8"F7<+6*\$7+. " \$*36+(#6'((, 3*6F76+45\$ " \$;="4-:\$, : -\$8 9(4% " 7\$;*\$: \$%H'":, 964-+. 1 4"5-\$* (+6<9+. " 5*<3(.

12. 1 2

3. 3I?8I<M>S<;6>< Q898S>

12. >%, 7\$4-(F"+(, P-\$3\$ \$F(76"8\$3\$ *"#<%H-6-6 /\$+0""'+ '(,)\$4-6+\$:%,"- \$)*"7"%(-H 4%"7<&=(" 47\$6-\$(\$%45%(. T-3-7.9T0T028T029)6/TT31T0. 250T83.9(-6)]TJ / F1

6))*(+' () . , (#%\$F"++ . " : L\$5\$36845\$1 4-*6-"3((, :)\$%+\$1 8"*" 4\$E*6+,&-
4:\$& 65-<6%H+\$4-H : + . +"N+"8 5\$+-"54-" , E6*65-"*(#<&="84, :4" ;\$%" " *"N(-"%H+\$1
)*(:"*F"++\$4-H& 7"%<8"+HN"+(, \$)64+\$4-(;"74-:(1;

b))*(+(86, :\$:+(86+(" :6F+\$4-H 8"F7<+6*\$7+\$3\$ 4\$-*<7+(9"4-:6 (
)6*-"*4-:6, 56F7\$" 3\$4<76*4-:\$ +"4"- 3%6:+<& \$-:"-4-:"++\$4-H #6

f) \$;=(+. (8"4-+. " :%64-(7\$%F+. \$;%676-H 4\$\$-:"-4-:<&=(8(
:\$#8\$F+\$4-,8(7%, <)*6:%"+(, *(45\$8 ;"74-:(1 (<8"+HN"+(, P-\$3\$ *(456 ;%63\$76*,
7\$4-<)< 5 +"\$;E\$7(8\$1 (+0\$*86' ((, *4<*468 ()\$%+\$8\$9(, 8 7%, \$4<="4-:%"+(, 8"*
+6)*6:%"++ . E +6 <8"+HN"+(" \$)64+\$4-(;"74-:(1;

g) 4%"7<"- <7"%,-H \$4\$;\$" :+(86+(" *6#:(:6&=(84, 4-*6+68,)\$7:"*F"++ . 8
;"74-:(, 8, \$4\$;"++\$ +6(8"+"" *6#:(- . 8 4-*6+68 (86% . 8 \$4-*\$:+. 8 *6#:(:6&=(84,
3\$4<76*4-:68, 4 <9"-8 E6*65-"*+. E 7%, +(E ;\$%" : . 4\$5(E <*\$:+"1 <,#:(8\$4-((*(456,
5\$-\$* . " #6964-<& +68+\$3\$)*" : . N6&- (E 4)\$4\$;+\$4-H "*"63(*\$:6-H +6 ;"74-:(, ()
)*\$:7(-H)\$4%"7<&=(" :\$44-6+\$:(-"%H+. " 8"*\$)*(-,(-;

h) +"\$;E\$7(8\$ *64N(*,-H 8"F7<+6*\$7+\$" ("*"3(\$+6%H+\$" 4\$-*<7+(9"4-:\$ ()
)\$8\$=H : \$;%64-(<8"+HN"+(, *(456 ;"74-:(1)\$4*"74-:\$8, : 964-+\$4-()<-"8:

-)"*"769(#+6+(1, -"E+\$%\$3(((P54)"*-\$3\$ \$) . -6 7%, +6*6=(:6+(,)
)\$-"+' (6%6 : \$;%64-(<8"+HN"+(, *(456 ;"74-:(1
- \$;8"+6 *"#<%H-6-68((44%"7\$:6+(1, (#:%"9"++ . 8 (<*\$568((+6(%<9N"1)
)*65-(5\$1
- 5\$8)(%, '(((+0\$*86' ((\$ *(45" (:\$#7"14-:((;"74-:(1 7%, :4"E
864N-6;\$: ;"74-:(1, 5\$-\$*<& 8\$F+\$ (4)\$%H#\$:6-H : '"%,E <4-\$19(:\$3\$
*6#:(-(, (<8"+HN"+(, \$)64+\$4-(;"74-:(1
- \$56#6+(, 4\$\$-:"-4-:<&="1)\$77"*F5(: '"%,E 4\$:"*N"+4-:\$:6+(,
<)*6:%"+(, 7%, *6#:"*-. :6+(, 7", -"%H+\$4-()\$<8"+HN"+(& *(456
;"74-:(1, (+(' (6-(: : \$;%64-()\$: . N"+(, (+0\$*8(*\$:6++\$4-((8"*)\$
+6*6=(:6+(&)\$-"+' (6%6 +6 :4"E <*\$:+,E, 4 -"8 9-\$; . <5")(-H
)\$-"+' (6%)*\$-(:\$7"14-:(, *6#:(:6&=(E4, 4-*6+ ;"74-:(, 8
- :4"\$;T"8%&="3\$, \$)"*6-(:+\$3\$ (P00"5-(:+\$3\$ \$4<="4-:%"+(,
64N("++\$1 (+(' (6-(: . : (+-"*"46E ;"7+. E 4-*6+ 4 : . 4\$5\$1
#67\$%F"++\$4-H& 4 <9"-8 :%(,+(, ;"74-:(1 +6)*("8%"8 . 1 <*\$:"+H
#67\$%F"++\$4-(4-*6+, \$-:"96&=(E 5*(-"* (, 8 :5%&9"+(, : 76++<&
)*\$3*688<
-)*"7\$4-6:%"+(, 0(+6+4\$:\$1)\$8\$=(4 '"%H& <8"+HN(-H 4<="4-:<&=("
*(45(((#;"F6-H :\$#+(5+\$:"+(, +\$: . E *(45\$:

i) :\$4)(-6+(" 5<%H-<* .)"7<)*"F7"+(,,: -\$8 9(4%" #6 49"- 8\$;(%(#6'((
67"5:6-+. E *"4<*4\$: 7%, <8"+HN"+(, *(456 ;"74-:(1,)"74-6:%,"- 4\$;\$1 4:\$"3\$ *\$76
(+:"4-('((: ;<7<="" , 5\$-\$* ." 767<- 4<=""4-:"++& \$-769<. B(4-"8 . \$'" +5(*(456 (
6++"3\$)"7<)"F7"+(,)"74-6:%,&- 4\$;\$1 F(#+"++\$:6F+ ." (+:"4-('((, 5\$-\$* ." "
4)\$4\$;4-:<&- #6=(- " (4)64"+(& 9"%\$:"9"45(E F(#+"1, (8<=""4-:6 (4*"74-: 5
4<=""4-:\$:6+(&, 4\$7"14-:<&- <4-\$19(:\$8<*6#: (-(& (,:%,&-4, 3\$*6#7\$;\$%" "
#6-*6-\$P00"5-(:+ . 8 (4 -\$95(#*" +(, <5*")%"+(, 8"E6+(#8\$: ;\$*H; . 4 ;"74-:(, 8(, 9"8
4'" +6*((,)"7)\$%636&=(" <7%"+" \$4+\$:+3\$:+(86+(, 8"*68 *"63(*\$:6+(, ()
)*\$:"7"+(& :\$44-6+\$:(-"%H+. E 8"*\$)*(, -(1)\$4%" ;"74-:(1;

j) 4<=""4-:<"- -65F" +"\$;E\$7(8\$4-H)*(+,-(, <)"F76&=(E 8"* 4 <9"- \$8 -\$3\$,
9-\$ P-6) . \$56#6+(,)\$8\$=(\$3\$*6#7\$

3. L4)\$%H#\$:6+(" #+6+(1, +\$:6-\$*45(E *"N"+(1 (\$;*6#\$:6+(, 7%, 4\$#76+(, ;"#)\$64+. E <4%\$: (1 ()\$- "' (6%6

)%6-0\$*8 . ¹⁰ 4 9"-5\$ <4-6+\$:%"++ . 8 (\$; , #6++\$4- , 8 (, +69(+6, 4 +6' (\$+6%H+\$3\$ (5\$+96,
8"4-+ . 8 <*\$: + , 8 (7% , \$; % "39" + (, 5\$\$*7(+6' ((8"F7< *6#% (9+ .

f) A. 7%"+" (" *4<*4\$: 7%, *6#*6;\$-5(()*\$:"7"+(, : F(#+H)\$%(- (5()\$ <)*6:%"+(& *(45\$8 ;"74-:(1, 6 -65F")*\$3*688, #65\$+\$: (+\$*8 : \$;%64-(<8"+HN"+(, *(456 ;"74-:(1 :\$:4"E 4\$\$-:"-4-:<&=(E 4"5-\$*6E (:%64-, 8(:4"E <*\$:+ "1 678(+ (4-*6' (((;&7F"-+\$3\$ \$;"4)"9"+(, +6 \$4+\$:" 9"-5\$ <4-6+\$:%"++\$1 \$9"*"7+\$4-(7"14-:(1.

g) D*6:(-"%H4-:6 7\$%F+. 7" 8\$+4- (*\$:6-H -:"*7<&)\$%(- (9"45<& *"N(8\$4-H, +"\$;E\$7(8<& 7%,)\$\$=*"+(, ((+-"3*6' ((64)"5-\$: <8"+HN"+(, *(456 ;"74-:(1 :)*\$3*688. *6#:(- (,.

iii) @7+- "0/ '%A03

g) D\$\$=*"+("<964-(, \$;=(+ : 7", -"%H+\$4-()\$ 4+(F"+(& *(456 ;"74-:(1)\$4*"74-:\$8 *6#*6;\$-5(5\$+5*" -+\$1)\$%(- (5(,)\$\$=*"+(, 4"-":\$3\$:#6(8\$7"14-:(, , 4-*6-"3(9"45\$3\$ <)*6:%"+(, *"4<*468(,)"7\$4-6:%, "8. 8(+6 7\$;*\$:\$%H+\$1 \$4+\$:" , *64)*"7%"+"(, *\$%"1 (\$; ,#6++\$4-"1 (7%"3(*\$:6+(, ()*"7\$4-6:%"+(, +"\$;E\$7(8 . E)\$%+\$8\$9(1 (*"4<*4\$:. .

2. : RNK7<@><, 5C<@68 > =5@>I5?>@M B86I5?5K ?>; 68 J<9; IK>A > E7ESG<@>< ?8@@<M5 D?<9ED?<P9<@>N

17. C-) *6:+ . 8)<+5-\$8 7%, 7", -"%H+\$4-()\$ <8"+HN"+(& *(456 ;"74-:(1 (:\$4)(-6+(& 5<%H-<* .)*\$-(:\$7"14-:(, ;"74-:(, 8 ,:%, "-4, #+6+(" \$)64+\$4-"1 (0(#(9"45(E, 4\$' (6%H+ . E, P5\$+\$8(9"45(E (P5%%\$3(9"45(E 065-\$*\$: <, #: (8\$4-(;"74-:(, 8, 4 5\$-\$* . 8(

b) !6#*6;\$-56 4(4-"8)\$56#6-"%1 *(456 ;"74-:(1 (<,#:(8\$4-(5 +(8 : +6' (\$+6%H+\$8 (4<;+6' (\$+6%H+\$8 864N-6;6E,)\$#:\$%,&=(E 7(*"5-(:+ . 8 \$*36+68 \$'"+(:6-H :\$#7"14-:(" ;"74-:(1¹²+6 4\$' (6%H+ . ", P5\$+\$8(9"45(" (P5\$%\$3(9"45(" <4%\$:(, , 6 -65F" (+0\$*8(*\$:6-H \$)\$%<9"++ . E *"#<%H-6-6E 7(*"5-(:+ . " \$*36+ . , \$;="4-:"++\$4-H (3*<)) . +64%"+"(, ,)\$7:"*F"++ . " *(45<.

4) !"3(4-*6' (, , 6+6% (#, \$; \$; ="+" ((*64)*\$4-*6+"+" +6 *"3<%, *+\$1 \$4+\$:" 4-6-(4-(9"45\$1 (+0\$*86' ((\$ 4%<96,E ;"74-:(1, (E :\$#7"14-:(((4: ,#6++ . E 4+(8()\$-"*,E 4(4)\$%H#\$:6+("8 8"F7<+6*\$7+ . E, *"3(\$+6%H+ . E, +6' (\$+6%H+ . E (8"4-+ . E 8"E6+(#8\$:.

ii) ?+33// 6#/4>6#/C4/30/

d) B\$#76+(" \$*("+-(*\$:6++ . E +6 (+-"*4 . +64%"+"(, 4(4-"8 *6++"3\$)*"7<)*"F7"+(, , :5%&96, 4(4-"8 . , 5\$-\$* . ")\$#:\$%,&- 4:\$":*"8"++\$)*"76:6-H \$)\$:"="+(, ,)\$+, -+ . " 7%, -"E, 5-\$)\$7:"*36"-4, *(45<, 5\$-\$* . " <9(- . :6&- 7"8\$3*60(9"45(" , 3"+7"*+ . " , 5<%H-<*+ . " (4: ,#6++ . " 4 \$;"4)"9"+("8 4*"74- : 5 4<="4- :\$:6+(& \$4\$;"++\$4-("'%": . E 3*<)),)*"7<486-*(:6, , : 964-+\$4-(,)*"7\$4-6:%"+(" *<5\$:\$7, =(E <56#6+(1 \$-+\$4(-"%H+\$ -\$3\$, 565(8 \$; *6#\$8 +67%"F(- 7"14- :\$:6-H)\$)\$%<9"+(& \$)\$:"="+(1, (5\$-\$* . " 4\$7"14- :<&- P00"5-(:+\$1 *6;\$-\$ *\$36+\$:, #6+(86&=(E4, <)*6:%"+9"45(8(64)"5-68(;*\$H; . 4 ;"74-:(, 8(, (7*<3(E 7(*"5-(:+ . E \$*36+\$:.

") B\$#76+(" ,)*"(\$7(9"45(1 \$;#*\$ 0<+5' (\$+(*\$:6+(, (4\$)\$:\$F7"+(" (+0\$*86' (\$++ . E 4(4-"8, :E\$7, =(E :4\$4-6: 4(4-"8 *6++"3\$)*"7<)*"F7"+(, , : "'%,E \$;"4)"9"+(,)*(+, -(, ; . 4-* . E (4\$3%64\$:6++ . E 7"14-:(1 : 4%<96" \$;T, :%"+(, -*":\$3(/:\$#+(5+\$:"+(, 9*"#: . 961+\$1 4(-<6' ((.

f) B\$#76+(" (+4-(-<' (\$+6%H+\$3\$)\$-"'(6%6 7%, \$;"4)"9"+(, +67%"F6="1 (+-"3*6' ((4(4-"8 *6++"3\$)*"7<)*"F7"+(, ,)*\$'"44 . *6#*6;\$-5()*6:(-"%H4-:"++\$1)\$%(-5(()*(+, -(,)*6:(-"%H4-:"++ . E *"N"+(1 (: 4(4-"8 . % (5:(76' (()\$4%"74-:(1 9*"#: . 961+ . E 4(-<6' (1 +6+6' (\$+6%H+\$8 (8"4-+\$8 <*\$:+,E, 6 -65F" 7%, (E *"3<%, *+\$1)*\$:"*5((\$'" +5((E -"E+(5\$-P54)%<-6' (\$++ . E)6*68"-*\$:.

¹² B8. 4+\$45(1, 2 (3.

g) D*\$:"7"+(" : F(#+H (-\$3\$: . E *N"+(1 :-\$*\$1 Q"F7<+6*\$7+\$1 5\$+0"*"+' ((
)\$ *6++"8<)*"7<)*"F7"+(&, 4\$4-\$, :N"14, : K\$+", J"*86+(, , : 2003 3\$7<¹³, : -\$8 9(4%"
)\$4*"74-:\$8 <5*)"%)"+(, 5\$\$*7(+6' (((4\$-*<7+(9"4-:6 8"F7< :4"8(4\$\$-:"-4-:<&=(8(
4"5-\$*68((4<;T"5-68(: 5\$+-"54-" 7", -"%H+\$4-(: \$;%64-(*6++"3\$)*"7<)*"F7"+(, ,
9-\$; . 7\$;(-H4, 4\$#76+(, :)\$%+\$1 8"*" P00"5-(:+ . E 4(4-"8 *6++"3\$)*"7<)*"F7"+(, .

h) C4<="4-:%"+" (-\$3\$: . E *5\$8"+76'(1 Q6:*(5(145\$1 4-*6-"3(()\$
76%H+"1N"8<\$4<="4-:%"+"(& K6*;67\$445\$1)*\$3*688 . 7"14-:(1)\$ \$;"4)"9"+(&
<4-\$19(:\$3\$ *6#:(-(, 86% . E \$4-*\$:+. E *6#:(:6&=(E4, 3\$4<76*4-., :5%&96, 4\$#76+" ((
<5*)"%)"+(" P00"5-(:+ . E 4(4-"8 *6++"3\$)*"7<)*"F7"+(, , 6 -65F" 7*<3(E 8"*)\$
48,39"+(& (*"63(*\$:6+(&.

iii) 1'"/3=0+2

i) B\$7"14-:(" 4\$#76+(& ()\$77"*F6+(& <4-\$19(:\$4-((+0*64-*<5-<* . (
+6<9+ . E, -"E+\$%\$3(9"45(E, -"E+(9"45(E ((+4-(-<' (\$+6%H+ . E :\$#8\$F+\$4-"1,
+"\$;E\$7(8 . E 7%, (44%"7\$:6+(, , +6;%&7"+(, , 6+6%(#6, 56*-(*\$:6+(, (, 5\$376 P-\$
:\$#8\$F+\$,)*\$3+\$#(*\$:6+(,)*(*\$7+ . E4\$#1*\$7+.E6+[(6+)8.(2(9)15.1(E)]TJ /F1 1 Tf 1.46 0 TD 0 Tc (

b) ?5*)"%"+" 4"- "1 :#6(8\$7"14- : (, 8"F7<P54)"*-68()\$:\$)*\$468 ;\$*H; . 4
;"74- : (, 8 (, 6 -65F" % (' 68 (, #6+(86&= (8(4, <)*6:%"+"8 ()%6+(*\$:6+("8
7" , -"%H+\$4- (: 76++\$1 \$;%64- (, : *6856E *6#%(9+ . E 4"5-\$*\$: (*6#%(9+ . E *"3(\$+\$: , 6
-65F" *6#*6;\$-56 (% (<5*)"%"+")*\$'"7<* 7% ,

ii) \$%#&'5+30/06#'D/--0'3+2;3+:6'4*' "'5)+

h) D\$\$=*"+(" :5%&9"+(, 7(4'())%(+, 5646&=(E4, <8"+HN"+(, *(456 ;"74-:(1, : 4\$\$-:"-4-:<&=(" *6#7"% . N5\$%H+. E <9";+. E)%6+\$: +6 :4"E <*\$:+,E \$; *6#\$:6+(, ((4)\$%H#\$:6+(" 7* <3(E \$0('(6%H+. E (+ "\$0('(6%H+. E 56+6%\$: 7%, *64)*\$4- *6+"+(, (+0\$*86' ((4*7(8\$%\$7"F((7"-1;)\$\$=*"+((+-"3*6'(()*\$;%"86-(5(<8"+HN"+(, (\$)64+\$4-(;"74-:(1 : 569"4-:" + "\$-T"8%"8\$3\$ P%"8"+-6 >"4,-(%"- (, \$; *6#\$:6+(, : (+-"*46E <4-\$19(:\$3\$ *6#:(- (, C*36+(#6'((C;T"7(+""+. E I6'(1 (2005-2015 3\$7.)).

i) D\$\$=*"+(" \$4<="4-: "%+(,)*\$3*688, 5646&=(E4, \$ "'+5(*(45\$: (\$;"4)"9"+(, 3\$-\$:+\$4-(5 ;"74-:(, 8 +6 8"4-+\$8 <*\$:+" , : N5\$%6E (: .4N(E <9";+. E #6:"7"+(, E.

j) D\$\$=*"+(" \$4<="4-: "%+(, : N5\$%6E)*\$3*688 (8"*\$)*(-1)\$ (#<9"+(&)<-"1 4:"7"+(, 5 8(+(<8< :\$#7"14-:(, \$)64+\$4-"1.

k) !6#*6;\$-56)*\$3*688)\$73\$-\$:5(567*\$: (\$;<9"+(,)\$:\$)*\$468 <)*6:%"+(, *(45\$8 ;"74-:(1 (<8"+HN"+(, P-\$3\$ *(456, \$*("+-(*\$:6++ . E +6 5\$+5*" -+. " 3*<)). (%(' , #6+(86&=(E4,)*\$;%"868()%6+(*\$:6+(, *6#:(- (, 678(+ (4-*6-\$*\$:, \$-:"96&=(E #6 \$*36+(#6' (& *6;\$- . : 4%<96, E 9*"#: . 961+. E 4(-<6' (1, 8"4-+. E 7\$%F+\$4-+. E %(' (-.7.).

l) D\$\$=*"+(" \$;=(++ . E (+(' (6-(: : \$;%64-()\$73\$-\$:5(4 <9"- \$8, : 4\$\$-:"-4-:<&=(E 4%<96, E, *\$%(7\$; *\$: \$%H' " : 4 "'%H&<5*")%"+(, 8"4-+\$3\$)\$-"' (6%6 : \$;%64-(48,39"+(, \$)64+\$4-(;"74-:(1 (;\$*H; . 4 ;"74-:(, 8(.

m) C;"4)"9"+(" *6:+\$3\$ 7\$4-<)6 F"+=(+ (<,#:(8 . E 4%\$": +64%" "+(, 5 +67%"F6="8<\$;<9"+(& (\$; *6#\$:6+(&. D\$\$=*"+(" \$;<9"+(, \$;"4)"9(:6&="3\$ <9"- 3"+7"*+. E (5<%H-<*+. E 065-\$*\$:, : 569"4-:" + "\$-T"8%"8\$3\$ P%"8"+-6 \$; *6#\$:6+(, (\$;<9"+(,)\$:\$)*\$468 <8"+HN"+(, *(456 ;"74-:(1 (<)*6:%"+(, P-(8 *(45\$8.

iii) (--2/4'5+30:

n) !6#*6;\$-56 ;\$%"" 4\$:"*N"++ . E 8"- \$7\$:)\$73\$-\$:5()*\$3+\$#+. E \$ "'+\$5 8+\$F"4-:"++ . E 065-\$*\$: *(456 (4\$' (6%H+\$-P5\$+\$8(9"45\$3\$ 6+6% (#6 #6- *6- (*"#<%H-6-\$: 8"* , 4: , #6++ . E 4 <8"+HN"+(" 8 *(456 ;"74-:(1, +6 :4"E <*\$:+,E; (+-"3*6' (, P-(E 8"- \$7\$: :)*\$' "44.)*(+, -(, *"N"+(1 +6 *3(\$+6%H+\$8, +6' (\$+6%H+\$8 (8"4-+\$8 <*\$:+,E.

\$) ?5*")% "E+(9 (+6<9+\$3\$)\$-"+' (6%6 : \$;%64-(*6#? (()*(8"+"+(, 8"-57 1, (44% (1 (8\$7"%1 7%, \$'" +5(<,#:(8\$4-("14-:(, : 5\$+-"54-" 3"\$%\$ (E,)\$3 , :\$7+. E (5%(86-(9"45(E \$)64+\$4-"1 96, 4\$:"*N"+4-:\$:6+ (\$+6%H -"+'Tf176\$6(-\$*(+36 (\$'" +\$5.

iv) (3D'#, 0# ' %A/- ' "0

) D\$\$= 964-(, : 8644\$:\$1 (+0\$*86'Tf : '"%,E)*\$) *\$:6+(, (7"()*\$-(:\$7"14-: 74-:(-(:+\$3\$ <964-(, \$;=(+ : \$4<="4-:%, +6 <4-\$19(:\$1

5\$8)"54+. " 8"* .)\$;\$*H;" 4 +6:\$7+"+(, 8((+67%"F6="" <)*6:%"+(" <,#:(8 . 8(P5\$4(4-"868(.

4) D\$\$=""+(" :5%&9"+(, : 4-*6-"3((<8"+HN"+(, *(456 ;"74-:(1 (676)-6'((5 (#8"+"+(& 5%(86-6 5\$8)\$+ "+-\$:, 5646&=(E4, <8"+HN"+(, *(45\$; ;"74-:(1, 4: ,#6++ . E 4 4<="4- :<&="1 (#8"+9(:\$4-H& 5%(86-6, 6 -65F" 4 ;<7<=(8 (#8"+"+(" 8 5%(86-6. C+(8\$3%(; . :5%&96-H : 4"; , 9"-5\$" \$)*"7%"+" (" *(45\$; ;"74-:(1, 4: ,#6++ . E 4 5%(86-\$8, *6#*6;\$-5<5\$+5*" -+ . E 8"*)\$ <8"+HN"+(& *(456 (;\$%" P00"5-(:+\$" (*"3<%, *+\$" (4)\$H#\$:6+((" (+0\$*86' ((\$ 5%(86-(9"45(E *(456E *6#*6;\$-9(568()%6+\$:, (+F"+"*68((7*<3(8((%('68(, <964-:<&=(8(:)*(+, -(("N"+(1.

ii) I#+) "0)+ - '=0+2;3 '* ' 0 E) '3' , 07/-) '* ' #+&50 "0:

d) D\$\$=""+(")*\$7\$:\$%H4-:"++\$1 ;"#)\$64+\$4-(: 569"4-:" :6F+\$3\$ 065-\$*6 \$;"4)"9"+(,)*\$-(:\$7"14-:(, \$;=(+ \$)64+\$4-, 8, : 964-+\$4-(: *61\$+6E,)\$7:"*F"++ . E #64<E", +6:\$7+"+(, 8, '(5%\$+68 (7*<3(8 \$)64+\$4-, 8, 5\$-\$* . " 8\$3<- \$3*6+(9(:6-H 4*"74-:6 5 4<="4-:\$:6+((& ,)\$%<96"8 . " #6 49"- 4"%H45\$3\$ E\$#, 14-:6.

") A+"7*"+(")%6+(*\$:6+(, , +6)*6:%"++\$3\$ +6 <8"+HN"+(" *(456 ;"74-:(1, : 4"5-\$*" #7*6:\$E*6+"+(, . B\$7"14-:(" *"6%(#6' ((#6769("K\$%H+(' . , \$3*6F7"++ . " \$- \$)64+\$4-(;"74-:(1,)\$4*"74-:\$8 \$;"4)"9"+(, -\$3\$, 9-\$; . :4" +\$. " ;\$%H+(' . 4-*\$(% (4H 4 \$)*"7%"++ . 8 <*\$:+ "8 <4-\$19(:\$4-(, 9-\$)\$: . N13193% [(,*)\$47:"846)58. 8(%)3(7*6:\$

h) A5%&9"+(" 8"*)\$ <8"+HN"+(& *(456 ;"74-:(1 :)*\$'"44. :\$44-6+\$:%"+(, (*"6;(%(-6'(()\$4%" ;"74-:(1¹⁵ ((4)\$%H#\$:6+(" :\$#8\$F+\$4-"1, \$-5* . :6&=(E4, +6 :\$44-6+\$:(-"%H+\$8 P-6)", : '"%,E +6*6=(:6+(,)\$-"+' (6%6,)#\$:\$%,&="3\$ <8"+HN(-H * (45 ;"74-:(1 : 7\$%3\$4*\$9+\$1)"*)4)"5-(:", : -\$8 9(4%")\$4*"74-:\$8 \$;8"+6 P54)"*-. 8 \$) . -\$8, #+6+(, 8(((+0\$*86' ("1 \$; (#:%"9"++ . E <*\$56E.

i) D*(+,-(" 8"* 5 \$;"4)"9"+(&, 5\$376 P-\$+"\$;E\$7(8\$, -\$3\$, 9-\$; .)*\$3*688 . : (+-"*"46E)"*"8"="++ . E %(' +")*(:\$7(% (5 <:"%(9"+(& *(456 (<,#: (8\$4-(5 \$)64+\$4-, 8.

j) !64N(*"+(" :\$#8\$F+\$4-"1 7%, 7(:"*4(0(56'(((4-\$9+(5\$: 7\$E\$7\$: +64%"+"(, : *61\$+6E 4)\$: . N"++\$1 4-)"H& *(456 4 '"%H& <8"+HN"+(, "3\$ <,#: (8\$4-(5 \$)64+\$4-, 8 (\$;"4)"9"+(, -\$3\$, 9-\$; . "3\$ 7\$E\$7. ((8<="4-:\$+" 4-*676%(\$-)\$%(- (5(()*\$'"44\$: *6#:(-(, ,)*(:\$7, =(E 5)\$: . N"+(& "3\$ <,#: (8\$4-(5 ;"74-:(, 8.

k) D\$\$=*"+(" 4\$#76+(, 8"E6+(#8\$: *64)*"7%"+"(, 0(+6+4\$: . E *(45\$: , (: 964-+\$4-(8"E6+(#8\$: 4-*6E\$:6+(, ()"*"4-*6E\$:6+(, +6 4%<961 ;"74-:(1.

l) D\$\$=*"+(" +6%6F (:6+(,)6*-+"*4-:6 8"F7<3\$4<76*4-:"++ . 8 (964-+ . 8 4"5-\$*68(4 '"%H& ;\$%" 65-(:+\$3\$:\$:%"9"+(, 964-+\$3\$ 4"5-\$*6 : 7", -"%H+\$4-H)\$ <8"+HN"+(& *(456 ;"74-:(1;)\$\$=*"+(" 964-+\$3\$ 4"5-\$*6 5 <5*")%"+(& 8"*)\$)*"7\$-:*6="+(& ;"74-:(1)*(<7%"+"((;\$%")*(4-6%H+\$3\$:+(86+(, -65\$1 4\$\$-:"-4-:<&="1

o) A4"4-\$*\$++(1 <9"- 4\$\$;*6F"+(1, 4: ,#6++ .E 4 *(45\$8 ;"74-:(1, :)*\$'"44"
)%6+(*\$:6+(, 5*<)+ .E)*\$"5-\$:

4) ?5")%"+(" (, 5\$376 P-\$+"\$;E\$7(8\$, *6#*6;\$-56 45\$\$*7(+(*\$:6++ .E
*"3(\$+6%H+ .E)\$7E\$7\$:, 6 -65F" *6#*6;\$-56 (%(4\$:"*N"+4-:\$:6+(" *"3(\$+6%H+\$1
)\$%(- (5(, \$)"*6-(:+ .E 8"E6+(#8\$:,)%6+\$: (4(4-"8 4:, # (7%, \$;"4)"9"+(, 3\$-\$:+\$4-(5
;"74-:(, 8 (; .4-*\$3\$ (P00"5-(:+\$3\$ *"63(*\$:6+(, +6 ;"74-:(, , 864N-6; . 5\$-\$* .E
)*": .N6&- +6' (\$+6%H+ .1)\$-"+' (6% ;\$*H; . 4 ;"74-:(, 8(.

d) D\$73\$-\$:56 (% ()"*48\$-* ()"*(\$7(9"45\$" \$;+:\$%"+(")%6+\$: \$;"4)"9"+(,
3\$-\$:+\$4-(5 ;"74-:(, 8 (9*"#: .961+ .E)%6+\$: ()\$%(- (5(+6 :4"E <*\$:+, E 4 \$4\$; . 8
65 "'+-\$8 +6+6(;\$%"< , #: (8 . " *61\$+ . (3*<)) . +64"%"+(, . D\$\$=*"+(")\$*: "7"+(,
*"3<%, *+ .E <9"+(1)\$)*\$:"*5" 4-")"+(3\$-\$:+\$4-(5 ;"74-:(, 8, :5%&96, \$-*6;\$-5< 8"*
P:65<6' ((, 4 "'%H& ; .4-*\$3\$ (P00"5-(:+\$3\$ *"63(*\$:6+(, +6 ;"74-:(, (\$;"4)"9"+(,
7\$4-<)6 5 \$4+\$: . 8)*\$7<5-68)(-6+(, (+)"*\$7\$:\$%H4-:"++ . 8)*\$7<5-68,
)\$4-6:%, "8 . 8 :)\$*, 75" \$56#6+(,)\$8\$=(, 4 <9"- \$8 8"4-+ .E)\$-*";+\$4-"1.

") B\$7"14-:(" 4\$#76+(& 9*"#: .961+ .E 0\$+7\$:, : -"E 8"4-6E (5\$376 P-\$
+"\$;E\$7(8\$, :)\$77"*F5< 8"* : \$;%64-("*"63(*\$:6+(, , :\$44-6+\$:%"+(, (\$;"4)"9"+(,
3\$-\$:+\$4-(.

f) !6#*6;\$-56 5\$+5*" -+ .E 8"E6+(#8\$: 7%, \$;"4)"9"+(, 65-(:+\$3\$ <964-(, ((,
#6(+-"*"4\$:6++\$4-(4\$-\$:-"4-:<&=(E 4\$)*(964-+ .E 4-\$*\$+, :5%&96, \$;=(+ . , :
7", -"%H+\$4-()\$ <8"+HN"+(& *(456 ;"74-:(1, \$)(*6, 4H, : 964-+\$4-(, +6)*(+' ()
7\$;*\$:\$%H+\$4-(.

IV. ! ;ET<;IK7<@>< > D5;7<9EHT>< =<?R

\$. ! JT>< ;55J?8P<@>N

21. A\$)*\$4. \$4<="4-:%"+(, ()\$4%"7<&=(E 8"* :)\$77"*F5< 4-*6-"3(9"45(E #6769 ()
)\$*(\$*(-"-+ .E +6)*6:%"+(1 7"14-:(1, (#%\$F"++ .E : +64-\$, ="1 !68\$9+\$1)*\$3*68 8"
7"14-:(1, 7\$%F+ . (#<96-H4, *6#%(9+ . 8 (#6(+-"*"4\$:6++ . 8 (4-\$*\$+68 (+6 \$4+\$:"
8+\$3\$4"5-\$*6%H+\$3\$)\$7E\$76, :5%&96&="3\$ 4"5-\$* *6#: (- (, . J\$4<76*4-:68,
"3(\$+6%H+ . 8 (8"F7<+6\$7+ . 8 \$*36+(#6' (, 8,

4(-<6' (,E (-: "*7\$ +68"*"+.)*(4\$\$-:"-4- :<&="1)\$77"*F5" 4\$ 4-\$** /7

) \$56#6+(")\$77"*F5(*6#: (- (& *3(\$+6%H+ . E 8"E6+(#8\$: ()\$-"' (6%6 :
\$;%64-(*6++"3\$)*"7<)*"F7"+(, ;"74-:(1, :5%&96, '<+68(19.

D. 4<P9E@8?59@R< 5?M8@>Q8C>>

32. Q"F7<+6*\$7+. 8 \$*36+(#6' (, 8, :5%&96, \$*36+(#6' ((4(4-"8 . C*36+(#6' ((
C;T"7(+""+. E I6' (1 (8"F7<+6*\$7+. " 0(+6+4\$: . " <9*"F7"+(, ,)*"7%636"-4, #6+, -H4,
*"N"+("8 4%"7<&=(E #6769 : *6856E (E 86+76-\$:,)*(\$*(-"-\$: (*"4<*4\$:.

6) A4"4-\$*\$++"" <964-(" : \$56#6+(()\$77"*F5((\$4<="4-:%"+"((Q"F7<+6*\$7+\$1
4-*6-"3((<8"+HN"+(, \$)64+\$4-(;"74-:(1 (4\$-*<7+(9"4-:\$: '"%,E)*\$)636+7 .
(4)\$%H#\$:6+(, 5\$8)%"54+. E)\$7E\$7\$: 5 4\$#76+(&)\$-"' (6%6)*\$-(:\$7"14-:(,
;"74-:(, 8 +6 <*\$:+" 3\$4<76*4-:(4\$;\$="4-:)\$4*"74-:\$8)\$\$=*"+(, +6%6F(:6+(, ;\$%"
-"4+. E 4: , #1, 4\$3%64\$:6++\$4-(((+-"3*6' ((P%"8"+-\$:, 5646&=(E4, <8"+HN"+(, *(456
;"74-:(1, : 3<86+(-6*+\$1 \$;%64-((: \$;%64-(<4-\$19(:\$3\$ *6#: (- (, 4\$3%64+\$ +64-\$, ="1
!68\$9+\$1)*\$3*688" 7"14-:(1;

b) <5*")%"+" \$;="3\$)\$-"' (6%6 4(4-"8 . C*36+(#6' ((C;T"7(+""+. E I6' (1)\$
\$56#6+(&)\$8\$=(*6#: (:6&=(84, 4-*6+68,)\$7:"*F"++ . 8 ;"74-:(, 8, : 7%" <8"+HN"+(,
(456 ;"74-:(1 #6 49"- +67%"F6=(E 4"74-:(5\$\$*7(+6' ((, 6 -65F" \$)"7%"+" ((
\$4<="4-:%"+" (+67%"F6=(E 8"* 7%, *"3<%, *+\$1 \$'" +5(7\$4-(3+<-\$3\$ (8 ()*\$3*"446 :
"6%(#6' (('"%1 ()(\$*(-"-\$: , <4-6+\$:%"++ . E :

) (+-"3*6' (, 8"* , +6)*6:%"++ .E +6)\$77"*F5<\$4<="4-:%" +(, +64-\$, ="1 !68\$9+\$1)*\$3*688 . , : 7" , -"%H+\$4-H 4\$\$-:" -4- :<&= (E 5\$\$*7(+6' (\$++ .E 8"E6+(#8\$:, -65(E 565 J* <))6 *6#: (- (, C*36+(#6' ((C ;T"7(+""+ .E I 6' (1 (Q"F<9*"F7"+9"45(1)\$4-\$, ++ . 1 5\$8 (-" - ()\$ 3<86+(-6*+\$1 7" , -"%H+\$4- () , : -\$ 9(4%"+6 +6' (\$+6%H+\$8 <*\$:+" (9"*"# 4(4-"8<5\$\$*7(+6-\$*\$: -*"#(7"+-\$: (4-*6+\$: ." 3*<)) . C*36+(#6' ((C ;T"7(+""+ .E I 6' (1. /*\$8" -\$3\$, <9"- 4\$\$; *6F"+(1, 4: , #6++ .E 4<8"+HN"+("8 *(456 ;"74-:(1, : *68\$9+ .E)\$%\$F"+(, E \$; \$56#6+(()\$8\$=(: '"%, E *6#: (- (, , -65(E 565 \$; =(" 4-*6+\$: ." '\$"'+5(, !68\$9+6,)*\$3*6886 C*36+(#6' ((C ;T"7(+""+ .E I 6' (1)\$ \$56#6+(&)\$8\$=(: '"%, E *6#: (- (, (4-*6-"3((4\$5*6="+(, 864N-6;\$: +(=" - . ;

f) \$4<="4-:%" +(" : -"4+\$8 :#6(8\$7"14-:((4 4<="4-:<&= (8(4"- , 8(()%6-0\$*868 (, 4\$- *<7+(9"4-:6 : (+-"*"46E \$; "4)"9"+(, 4\$3%64\$:6++\$3\$ +6 8"F7<+6*\$7+\$8 <*\$:+" 4;\$*6 76++ .E ()*\$3+#(\$*:6+(, : \$-+\$N"+(()*(*\$7+ .E \$)64+\$4-"1, 065-\$*\$: < , #: (8\$4-((*(45\$: (:\$#7"14-:(, ;"74-:(1 : %&; .E 864N-6;6E. V-((+(' (6-(: . 7\$%F+ . :5%&96-H : 4"; , *6#*6;\$-5<4-6+76*-\$: , : "7"+(" ;#6 76++ .E , *6#*6;\$-5<)\$56#6-"%1 ((+7"54\$; ,)\$77"*F5<4(4-"8 *6++"3\$)*"7<)"*F7"+(, , :4"\$;T"8%&=(1 (\$-5* . - . 1 \$; 8"+ 76++ . 8(((4)\$%H#\$:6+(" *"#<%H-6-\$: +6;%&7"+(1 in situ (7(4-6+' (\$++\$3\$ # \$+7(*\$:6+(, ;

g) \$56#6+(")\$77"*F5(3\$4<76*4-:68)<-"8)"7\$4-6:%" +(, +67%"F6="1, 4:\$: *"8"++\$1 (E\$*\$N\$ 45\$\$*7(+(*\$:6++\$1 8"F7<+6*\$7+\$1)\$8\$=(: % (5: (76' (()\$4%"74-:(1)\$)*\$4H; " #6-*\$+<- .E 4-*6+ (: 4\$\$-:"-4-:((4 4\$3%64\$:6++ . 8(*<5\$:\$7, =(8()*(+' ()68(, 5646&=(8(4, 9"*#: . 961+\$1)\$8\$=((5\$\$*7(+6' (\$++ .E 8"*\$)* (, -(1²⁰ . D*"7\$4-6:%" +(" -65\$1)\$8\$=(4 '"%H&<8"+HN"+(, *(456 (< , #: (8\$4-(, *64N(*"+(,)\$-+' (6%6 (\$; "4)"9"+(, P00"5-(: + .E 8"E6+(#8\$: 8"F7<+6*\$7+\$3\$ 4\$-*<7+(9"4-:6 : \$; %64-()*\$: "7"+(,)\$(45\$:\$-4)646-"%H+ .E \$)"*6' (1 : 3\$*\$76E²¹. C; "4)"9"+(" 4\$#76+(, +6 +6' (\$+6%H+\$8 (8"4-+\$8 <*\$:+" , E 8"E6+(#8\$: 7% , \$)"*6-(: +\$3\$ 8"F7<+6*\$7+\$3\$)"63(*\$:6+(, : '"%, E \$56#6+(,)\$8\$=(#6-*\$+<- . 8 *61\$+68, 6 -65F" <5*")%" +(" +67%"F6=(E 4: , #1 4<4((, 8()\$)*\$: "7"+(& :\$44-6+\$: (-"%H+ .E 8"*\$)* (, -(1 (7" , -"%H+\$4-H&)\$ <8"+HN"+(& *(456;

h) <5*")%" +(" 8"F7<+6*\$7+ .E 8"E6+(#8\$: 7% , \$56#6+(,)\$77"*F5()\$4-*676:N(8 \$- ;"74-:(1 3\$4<76*4-:68 +6 P-6)")"*"E\$76 5 <4-\$19(:\$8<0 (#(9"45\$8< , 4\$' (6%H+\$8< (P5+\$8(9"45\$8< :\$44-6+\$:%" +(& : 4+(F"+((;<7<=(E *(45\$:. V-\$ 7\$%F+\$:5%&96-H : 4"; ,)\$77"*F5<7" , -"%H+\$4- ()\$ <8"+HN"+(& *(456 : 5\$+-"54-"

²⁰ / 65 <56#6+\$: *"#%&' ((46/182 J"+"*6%H+\$1 @4468 ;%" (.

²¹ !6;\$-6)\$ 4\$3%64\$:6++\$8<\$4<="4-:%" +(& *"#%&' ((57/150 J"+"*6%H+\$1 @4468 ;%" (.

6#: "" + <- . E)\$4% " ; "74- : (1) *\$ ' "44\$: :\$44-6+\$: %"+ (, (<4-*6+"+(, +6+"4"++\$3\$ <="* ;6
(\$; 8 "+ +67% "F6="1) *65- (5\$1 (#+6+(, 8 ((-"E+(9"45\$ " 4\$7"14- : (" :\$:#6(8\$7"14- : ((
4 4\$\$- : "-4- : <&=(8 (4-*6+68 (, P54) "*" -68 ((\$*36+(#6 ' (, 8 (4(4-"8 . C*36+(#6 ' ((
C ; T"7 (+ "++ . E I 6 ' (1 ;

i) <5*") %"+ (" (676) -6 ' (, 4<="4- : <&="1 8 "F<9*"F7"+9"45\$1) *\$3*688 .
)\$73\$-\$: 5 () \$: \$) *\$468 ; *H ; . 4 ; "74- : (, 8 (4 (4) \$ %H# \$: 6+ (" 8 \$; = "1,
8 "F<9*"F7"+9"45\$1 4-*6-"3(((*68\$9+\$1 \$4+\$: . 7% , <) *6 : %"+ (, * (45\$8 ; "74- : (1,
\$E : 6- . : 6&="1 64) "5- . <8 "+HN"+ (, 4- ") "+ (* (456 ; "74- : (1 , \$; "4) "9"+ (, 3\$-\$: +\$4- (5
+ (8 , *"63 (*\$: 6+ (, +6 + (E () *\$: "7"+ (, : \$44-6+\$: (- "%H+ . E 8 "*" \$) * (, - (1 .

, . **4 <P9E@8?59@8N ; I?8I<M>N E=<@FG<@>N 5D8 ; @5 ; I> J<9 ; IK>A**

33. D6* - + "*" 68 , <964- : <&=(8 : * "6% (#6 ' ((Q "F7<+6*\$7+\$1 4-*6-"3((<8 "+HN"+ (,
\$) 64+\$4- (; "74- : (1 , (: 964- +\$4- (Q "F<9*"F7"+9"45\$1 ' "% : \$1 3* <)) \$: \$) *\$468
<8 "+HN"+ (, \$) 64+\$4- (; "74- : (1 (" " 9% "+68 , : 4\$- * <7+ (9"4- : " 4 4\$\$- : "-4- : <&=(8 (
+6 ' (\$ +6%H+ . 8 (, * "3 (\$ +6%H+ . 8 (, 8 "F7<+6*\$7+ . 8 (\$ *36+68 ((\$ *36+68 (

4))*\$:"7"+("

g))\$73\$-\$:56)"*((\$7(9"45(E \$;#\$\$:)*\$3*"446, 7\$4-(3+<-\$3\$: *"6%(#6' ((
'%"1 ()*((\$*(-"-+. E #6769 +64-\$, ="1 !68\$9+\$1)*\$3*688 . 7"14-:(1, : *6856E
)*\$' "446 5\$8)% "54+\$3\$ (45\$\$*7(+(*\$:6++\$3\$ \$4<="4- :%" +(, *"N"+(1 5\$+0""*"+' (1 ()
:4-*"9 +6 : .4N"8 <*\$:+" C*36+(#6' ((C;T"7(+""+. E I 6' (1 ()\$4%"7<&="1
7", -"%H+\$4-(: 4: ,#(4 +(8(, 4\$3%64+\$ 86+76-<, <4-6+\$:%""+\$8< J""*6%H+\$1
@4468 ;%" "1²⁴, ()*"74-6:%"+(" 7\$5%67\$: (5*6-5(E 4\$\$;="+(1 @4468 ;%" (7*<3(8
\$*36+68 C*36+(#6' ((C;T"7(+""+. E I 6' (1,)*()\$4-<)%"+((4\$\$-:"-4- :<&="1)*\$4H; .
(% (: 4%<96" +"\$;E\$7(8\$4-(, +6 \$4+\$:" (+0\$*86' ((,)\$%<96"8\$1 \$- +6' (\$+6%H+ . E
)%6-0\$*8, *"3(\$+6%H+ . E (8"F7<+6*\$7+ . E \$*36+(#6' (1 (7*<3(E #6(+-"*4\$:6++ . E
4-\$*\$+, :5%&96, (+0\$*86' (& \$)\$4%"7<&="1 7", -"%H+\$4-()\$ \$4<="4- :%" +(&
"5\$8"+76' (1 :-\$\$1 Q"F7<+6*\$7+\$1 5\$+0""*"+' (()\$ *6++"8<)*"7<)*"F7"+(&
(2003 3\$7)²⁵.

F. 4 5J>7>08C>N ?<;E?;5K

34. J\$4<76*4-:6 :)*"7"%6E 4:\$ (E 0(+6+4\$: . E :\$#8\$F+\$4-"1, 6 -65F" *"3(\$+6%H+ . " ()
8"F7<+6*\$7+ . " \$*36+(#6' ((, 4 (4)\$H#\$:6+("8 +67%"F6=(E 8"E6+(#8\$:
8+\$3\$4-\$*\$++"1, *"3(\$+6%(2 (%)31T7 . 090TD5T€)Tj/ TT31T0 . 250TD-0 . 0003T&T0 . 540TD()Tj/ TT3

4) <7%"+"(+67%"F6="3\$:+(86+(, 8"*68)\$ <8"+HN"+(& *(456 ;"74-:(1 :
6856E 4\$\$-:"-4-:<&=(E 8+\$3\$4-\$\$++(E (7:<4-\$*\$++(E)*\$3*688)\$8\$=(*6#:(-(&,
:5%&96,)*\$3*688 ., 5646&=("4, 4\$5*6="+(, 864N-6;\$: +(" - ., *6' (\$+6%H+\$3\$
(4)\$%H#\$:6+(,)*(*\$7+ .E *"4<*4\$:, 3*67\$4-\$*(-"%H4-:6 (676)-6' ((5 (#8"+"+(&
5% (86-6;

d) :+"4"+(+67%"F6=(E 7\$;*\$:\$%H+ .E 0(+6+4\$: .E :#+\$4\$: : Z"%":\$1 0\$+7
C*36+(#6' ((C;T"7(+""+.E I6' (1 7%, <8"+HN"+(, \$)64+\$4-(4-(E(1+.E ;"74-:(1 7%,
\$;"4)"9"+(, 67"5:6-+\$1)\$77"*F5()\$4%"7<&="1 7", -"%H+\$4-()\$: .)\$%+"+(&
+64-\$,="1 !68\$9+\$1)*\$3*688 . 7"14-:(1. @+6%(# -"5<="3\$ (4)\$%H#\$:6+(, ()
) *65-(9"45(E :\$#8\$F+\$4-"1 *64N(*"+(,

U?>75P<@><

**%<65I5?R< 5;@5K@R<=@5M5;I5?5@@><>@>C>8I>KR, 68;8HT><;N
E=<@FG<@>N ?>;68 J<9;IK>A**

L S>;7E=@5M5;I5?5@@>W ?8=5S@RW 5;@5K > 9<678?8C>A,

- A -*" -H" 1 D*\$3*688" 7"14-:(1 7%, +6(8"+"" *6#:(- .E 4-*6+²⁹,)*(+, -\$1 :
2001 3\$7<,)6*-+"*68)\$)*\$' "44< *6#:(- (,)*"7%636"-4,)*(+, -H 4\$\$-:"-4- :<&= ("
8"* . 4 <9"- \$8 -\$3\$, 9-\$: \$4+\$:+\$1)*\$3*688" (: *6856E (+4- (-<' (\$+6%H+ . E
8"E6+(#8\$: \$4<="4-:%"+(, Q"F7<+6*\$7+\$1 4-*6-"3((<8"+HN"+(, \$)64+\$4-(
;"74-:(1 P-(8 4-*6+68 <7"%,"-4,)*(\$*(-"+\$" :+(86+(".
- A >"5%6*6' ((- . 4, 9%" - (, ³⁰ (4"+- , ; *H 2000 3\$76) : 569"4-:" \$4+\$:+. E ' "%" 1
)*\$:\$#3%6N6&-4, "M6= (-6

- J" + "*"6%H+6, @4468 ;%" ,³⁴ *"\$5\$8"+7\$:6%6 / \$+0"*"+' ((B-\$*\$+ !68\$9+\$1 5\$+: "+' ((C*36+(#6' ((C;T"7(+""+. E I6' (1 \$; (#8"+"((5%(86-6³⁵ (B-\$*\$+68 / (\$-45\$3\$)*\$-\$5\$%6³⁶ (:4-<)6&="3\$: 4(%< : 0":*6%" 2005 3\$76))*\$7\$%F6-H (#<9"+ (")63<;+. E)\$4%"74-:(1 (#8"+"((, 5%(86-6, \$4\$;""+\$ 7%, -"E *6#: (:6&=(E4, 4-*6+, 5\$-\$*." +6E\$7, -4, : \$4\$;""+\$ <,#: (8\$8)\$%F"+((J" + "*"6%H+6, @4468 ;%" ,³⁷ -65F")*(# :6%6 Q"F)*6: (-"%H4-:"++& 3*<))<P54)"*-\$:)\$ (#8"+"(& 5%(86-6)*\$7\$%F6-H '\$"+5<)63<;+. E)\$4%"74-:(1 (#8"+"((, 5%(86-6 7%, 4\$' (6%H+\$- P5\$+\$8(9"45(E *6#: (:6&=(E4, 4-*6+ ((E 4(4-"8 <8"+HN"+(, \$)64+\$4-(4-(E(1+ . E ;"74-:(1.
- /\$+: "+' (, S68)"*" \$)*\$7\$4-6:%"+((-"%5\$88<+(56' (\$++ . E *"4*4\$: 7%, 48,39"+(,)\$4%"74-:(1 ;"74-:(1 (\$4<="4-:%"+(, \$)"*6' (1)\$56#6+(&)\$8\$=(1998 3\$76 :4-<)(%6 : 4(%< : ,+:6*" 2005 3\$76.
- L\$5\$368456, 4-*6-"3(,)\$ \$;"4)"9"+(& ;\$%" ;"#)\$64+\$3\$ 8(*6: !<5\$:\$7, =(")*(+' () .)*\$7\$-:*6="+(, 4-(E(1+ . E ;"74-:(1, \$;"4)"9"+(, 3\$-\$+4\$-(5+(8 (48,39"+(, (E)\$4%"74-:(1 (D%6+ 7"14-:(1³⁸ (1994 3\$7) ; .%6)*(+, -6+6 A4"8(*+\$1 5\$+0"*"+' (()\$ <8"+HN"+(& \$)64+\$4-(4-(E(1+ . E ;"74-:(1 4<9"-8\$ 4*"7+"4*\$9+\$3\$ \$;#\$*6 E\$76 \$4<="4-:%"+(, Q"F7<+6*\$7+\$3\$ 7"4, -(%)-(,)\$ <8"+HN"+(& \$)64+\$4-(4-(E(1+ . E ;"74-:(1.
- A 1994 3\$7< ; .%6)*(+, -6 (: 1996 3\$7< :4-<)(%6 : 4(%< /\$+: "+' (, C*36+(#6' ((C;T"7(+""+. E I6' (1)\$;*\$H;" 4\$)<4- . +(:6+("8 : -"E 4-*6+6E, 5\$-\$*." (4) . . :6&- 4"*H"#+& #64<E< (/(% (\$)<4- . +(:6+(" , \$4\$;""+\$: @0*(5"³⁹ . /*\$8" -\$3\$, : 1992 3\$7< ; .%6)*(+, -6 (: 1993 3\$7< :4-<)(%6 : 4(%< /\$+: "+' (, C*36+(#6' ((C;T"7(+""+. E I6' (1 \$; (\$%\$3(9"45\$8 *6#+\$;\$;*6#(⁴⁰ .

³⁴ !"#%&' ((J" + "*"6%H+\$1 @4468 ;%" (, 5646&= ("4, 4-(E(1+ . E ;"74-:(1 (<,#: (8\$4-(59/233 (58/215).

³⁵ United Nations, *Treaty Series*, vol. 1771, No. 30822.

³⁶ FCCC/CP/1997/7/Add.1, *N"+(" 1/B!.3,)*(%F"+(".

³⁷ !"#%&' ((J" + "*"6%H+\$1 @4468 ;%" (, 5646&= ("4, 4-(E(1+ . E ;"74-:(1 (<,#: (8\$4-(59/233 (58/215).

³⁸ A/CONF.172/9.

³⁹ United Nations, *Treaty Series*, vol. 1954, No. 33480.

⁴⁰ United Nations, *Treaty Series*, vol. 1760, No. 30619.

- J"+"*6%H+6, @4468;%",⁴¹ (1991 3\$7))*(#:6%6 5 <5*")%" +(& 5\$\$*7(+6' ((: \$;%64-(
9*"#: .961+\$1 3<86+(-6*+\$1)\$8\$=(C*36+(#6' ((C;T"7(+""+. E I 6' (1 : 4%<96"
4%\$F+. E 9*"#: .961+. E 4(-<6' (1 (4-(E(1+. E ;"74-:(1. C+6+6)\$8+(%6 \$
Q"F7<+6*\$7+. E *6856E 7"14-:(1 7%, Q"F7<+6*\$7+\$3\$ 7"4,-(%"- (,)\$
<8"+HN"+(& \$)64+\$4-(4-(E(1+. E ;"74-:(1 (*"#%&' (, 44/236, 1989 3\$7) (
<4-6+\$:(%6 *<5\$:\$7, =(")*(+' () ., 5646&=("4, 3<86+(-6*+\$1)\$8\$=(,
\$;"4)"9"+(, 3\$-\$:+\$4-(()*"7<)"F7"+(, , 6 -65F")"E\$76 \$- 9*"#: .961+\$1
)\$8\$=(5 :\$44-6+\$:%"+(& (*6#:(-(&.

"<Q57HC>N 3

- 56789 L5=>I<18 D5 D?5K<?6< D57@5=5S>A

I 6 4:\$"8 7":,-\$8)%" +6*+\$8 #64"76+((22 ,+:6*, 2005 3\$76 A4"8(*+6, 5\$+0""+' (,
)\$ <8"+HN"+(& \$)64+\$4-(;"74-:(1)\$ *"5\$8"+76' ((/\$8(-"-6)\$)\$:"*5")\$%+\$8\$9(1
)*(+, %6 4%"7<&=<& *"#%&' (&:

"A4"8(*+6, 5\$+0""+' (,)\$ <8"+HN"+(& \$)64+\$4-(;"74-:(1,

#+-- , ' "#/5 4')2+4 /\$8(-"-6)\$)\$:"*5")\$%+\$8\$9(1⁴² (4\$7"*F6=<&4, : + "8
*"5\$8"+76' (&,

>"5/#C4+/" 7\$5%67 /\$8(-"-6)\$)\$:"*5")\$%+\$8\$9(1".

#78K8 II

VS8;I@>6>> 5?M8@>Q8C>N ?8J5IR

\$. -8I8 > =<;I5 D?5K<9<@>N L5@B<?<@C>>

1. A4"8(*+6, 5\$+0""+' (,)\$ <8"+HN"+(& \$)64+\$4-(;"74-:(1 4\$4-\$,%64H : /\$;"
2 (\$3\$, O)\$+(, , 18-22 ,+:6*, 2005 3\$76. M6 P-\$-)"*(\$7 /\$+0""+' (,)\$:"*6 7":,-H
)%" +6*+. E #64"76+(1.
